Nature Connections

News and Events from the Missouri Department of Conservation • July/August 2015



Restoring Our Native Prairies And Grasslands restoration of Missouri prairie

The tallgrass prairie habitat that once covered much of western Missouri in a sea of native

grasses and wildflowers has dwindled to remnant pockets of native vegetation scattered infrequently across the landscape. These prairie patches provide small snapshots of an ecosystem that was once common in this area. The Missouri Department of Conservation's (MDC) management and

prairie wildflower and grass species were planted on the area. The seed had been harvested last summer from Missouri prairies.

Newly seeded prairie reconstruction sites will be mowed three to six times during the first growing season to reduce competition from annual weeds and provide better opportunities for prairie seedlings to get sunlight and moisture. These sites will be mowed one or two times during the second growing season and a prescribed burn will occur in about three to four years.

The end results of this work are native grasslands that provide diverse habitat for pollinating insects, grassland birds, and other wildlife species. Various types of wildflowers not only provide summer visual treats for people who visit prairies, but they provide valuable habitat

> for bees and butterflies-two insects whose pollinating

Seeing a Missouri prairie isn't as easy as it used to be.

call native grasslands home, it has benefits for human occupants of these areas too.

areas not

only help the

broad spectrum of

wildlife species that

An example of what MDC is doing to restore native grasslands is underway at Shawnee Trail Conservation Area in Barton County. Currently, more than 32 acres of what had been agricultural crop fields are being converted to native grasslands. This is the latest component of a prairie reconstruction project that has been ongoing for more than 10 years at Shawnee Trail Conservation Area. Over that period, MDC staff has converted more than 300 acres of agricultural crops and

fescue pastures into prairie reconstruction. Long-term plans are to conduct prairie reconstruction projects annually with a projected goal of more than 600 acres being converted to prairie.

The process for the current 32-acre project started with crop manipulation followed by managed burns. This past winter, seeds from approximately 70 different native

routines are important to humans. Prairie plants also provide environmental benefits through the capture of carbon dioxide from the atmosphere and their retention of carbon in their leaves, stems, and roots. Trees have a well-known (and welldeserved) reputation of pulling carbon dioxide out of the atmosphere, but grasslands play an important role in this process too.

It's also hoped that the management strategies MDC staff are doing with diverse native grasslands on Missouri's public land can be replicated in some form by citizens on privatelyowned pastures and fields. In addition to providing habitat benefits for wildlife, the use of warmseason grasses can provide grazing benefits to livestock at times of the year when nonnative coolseason grasses are not at their nutritional peaks.

Information about prairies in Missouri and about native grassland management strategies landowners can do may be found online at <mdc.mo.gov/node/3353>.

—Dave Darrow, Wildlife Management Biologist

Joplin Office in the Wildcat Glades Conservation & Audubon Center

201 W. Riviera Drive, Suite B, Joplin, MO 64804 • mdc.mo.gov/node/292



The Joplin Conservation Office, located in the Wildcat Glades Conservation & Audubon Center, is your local connection to Missouri's fish, forests, and wildlife. Stop by and purchase hunting and fishing permits, attend a nature program, go for a hike, enjoy a picnic, or access Shoal Creek. Within the 190 acres of Wildcat Park, you will find a diverse mix of wildlife habitats rich with flora and fauna. From I-44, take exit 6, and turn south on MO-86. Turn right on Riviera Drive to enter Wildcat Park.

JOPLIN OFFICE HOURS:

Monday–Friday: 8 AM–5 PM Closed all state holidays.

AUDUBON CENTER HOURS:

Tuesday-Saturday 9 AM-5 PM & Sunday 1-5 PM

TO REGISTER FOR A PROGRAM:

Programs are free. Call **417-629-3423** to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

Basic Shotgun For Women Session I: July 8 • Wednesday • 6–9 PM

Wildcat Glades Conservation & Audubon Center (Joplin)

Session II: July 10 • Friday • 6–8 PM

Fort Crowder Conservation Area (Neosho)

Registration required (women ages 14 and up;

ages 14–17 must be accompanied by an adult)

This two-session, women's-only class is designed to help introduce new shooters to hunting and the shotgun sports. Please plan on attending both sessions. All guns and ammunition will be provided.

Basic .22 Rifle

July 13 • Monday • 5:30–7:30 PM
Fort Crowder Conservation Area (Neosho)
Registration required (ages 11 and up; ages
11–17 must be accompanied by an adult)
Develop a new lifelong skill by attending this basic
program designed to teach beginning shooters safely
while having fun and learning about bolt action .22
rifles. All equipment will be provided.

July and August Events _____

Shoal Creek Cleanup

July 18 • Saturday • 8 AM—1 PM Shoal Creek (Joplin) to Schermerhorn Park (Galena, KS) Registration required (experienced paddlers ages 13 and up; ages 13—17 must be accompanied by an adult)

Paddle your way down the creek in your canoe or kayak and help us put the "bash on trash." Join various Missouri/Kansas conservation partners including area landowners, Southwest Ozark Stream Teams, Missouri Department of Conservation, and Audubon Missouri to help keep our waterways clean. A limited number of canoes will be available to adults and teens with canoeing experience. Program specifics and shuttle information will be provided upon registering.

Basic Shotgun

July 27 • Monday • 5:30–7:30 PM
Fort Crowder Conservation Area (Neosho)
Registration required (ages 14 and up; ages 14–17
must be accompanied by an adult)
Discover shotgums with this basic course designed

Discover shotguns with this basic course designed to get new shooters on target! We will discuss gun fit, basic shooting techniques, and breaking simple targets. Feel free to bring an unloaded shotgun you are comfortable shooting; otherwise, guns and ammunition will be provided.

Family Archery Night

July 28 • Tuesday • 6–8 PM

Walter Woods Conservation Area (Joplin) Registration required (ages 7 and up with an adult mentor)

Learn the fundamental skills and safety of archery shooting. We will cover bow nomenclature, hand set, bow set, pre-draw, stance, and much more. Join in the fun as you discover the basics of archery, learn how to hone your shooting skills, and start to enjoy this lifelong activity. All equipment will be provided.

Effective Wing Shooting For The Hunter

Session I: August 6 • Thursday • 6–9 PM Wildcat Glades Conservation & Audubon Center (Joplin)

Session II: August 8 • Saturday • 9 AM—4 PM
Fort Crowder Conservation Area (Neosho)
Registration required (experienced shotgun
hunters ages 15 and up; ages 15 -17 must be
accompanied by an adult mentor)
Do you want to harvest more waterfowl, upland
game birds and/or doves? This class is based on
extensive study and field experience and can be an
eye-opening training if you are a hunter. We will
discuss the performance differences between lead shot
and nontoxic shot, wounding rates in waterfowl, and
distance estimation. Please plan on attending both
sessions. Participants may bring their own unloaded
shotguns and ammunition or use the provided firearms,
ammunition, and targets.

Water Festival Fishing Derby

August 8 • Saturday • 8–10 AM Walter Woods Conservation Area (Joplin) Registration required (ages 15 and younger must be accompanied by an adult mentor)

Kids will have the chance to catch and release fish and register for prizes. Awards and prizes will be given away at the Shoal Creek Water Festival following the derby. All equipment, tackle, and bait will be provided. Fishing slot times are limited.



Shoal Creek Water Festival

Shoal Creek in Joplin

August 8 Saturday • 10 AM—3 PM Wildcat Glades Conservation & Audubon Center (Joplin)

No registration required (all ages)
Cool off at the Shoal Creek Water Festival. Join us for this partnership event at the creek in Wildcat Park for a day of water fun. Take a dip in Shoal Creek in your cardboard boat, cheer your duck on to victory during the duck race, or splash in Silver Creek during the Creek Hike. Learn about conservation, water quality, and ecology at one of our water activity booths as you stroll along the creek!

Women's Basic Handgun

Session I: August 12 • Wednesday • 6–9 PM Wildcat Glades Conservation & Audubon Center (Joplin)

Session II: August 17 • Monday • 6–8 PM Fort Crowder Conservation Area (Neosho) Registration required (women ages 18 and up) This two-part introduction to handgun safety course is designed for women who want to learn more about pistols and pistol shooting. You must attend both sessions. All firearms and ammunition will be provided.

Youth Dove Pre-Hunt Workshop

August 29 • Saturday • 9 AM-12 NOON

Youth Dove Hunt

September 5 • Saturday • ONE HOUR BEFORE SUNRISE Shawnee Trail Conservation Area (Mindenmines)

Registration required (only Hunter Education certified youth ages 11–15 with an adult mentor)
To attend the Youth Dove Hunt, participants must attend the pre-hunt workshop. This will include instruction on firearm safety, bird identification, shooting technique, and dove management at the Shawnee Trail Conservation Area shop. Youth must be Hunter Education Certified and registered to attend.

Andy Dalton Shooting Range and Outdoor Education Center

4897 N. Farm Road 61, Ash Grove, 65604 • mdc.mo.gov/node/288

August Events_____

Effective Wing Shooting For The Hunter

August 22 • Saturday • 8:30 AM-4:30 PM Registration required (ages 15 and up) Join us for this premier wing shooting program and learn about wounding rates in waterfowl, performance differences of steel and lead shotshells, and how to improve your wing shooting and distance estimation skills. This program is designed to teach hunters to be more proficient hunting birds like dove, quail, pheasants, turkey, migratory birds, and waterfowl. Participants need to bring their own shotgun and choke tubes and any hunting ammunition they need to pattern test for performance (12- and 20-gauge nontoxic/steel ammunition is provided FREE of charge).

Here Come The Doves

The Bois D'Arc Conservation Area is 3,172 acres and is located in western Greene County. The area headquarters is located at 11049 W. Farm Road 94 near Ash Grove. Daily hunter cards may be picked up there and are required for all species hunted. The first seven days of dove season each hunter will be

checked in and out at the headquarters and after seven days it becomes self check-in at the booth which is well signed. Depending on the weather, the first few days are usually the best hunting because doves are migratory and they may not stay around long. Statewide regulations are in effect and dove hunting is open from one-half hour before sunrise to sunset. Decoys and portable blinds are permitted but must be removed from the area daily. Mourning doves, white-winged doves, and Eurasian collared doves may be taken in the aggregate for the daily limit. Nonlead shot is not mandatory but is recommended. Approximately 100 acres of wheat and 100 acres of sunflower are planted each year and manipulated to attract doves to the area. These plantings also create wildlife habitat for quail, turkey, other ground nesting birds, and an abundance of deer. The 2014 dove season produced 830 dove hunters and 2,317 doves harvested in the first 30 days. Other cereal grain crops of corn, soybeans, and milo are planted by local farmers to provide additional habitat with a percentage left standing in the fields for wildlife.

The Andy Dalton Shooting Range and Outdoor Education Center is located on the Bois D'Arc Conservation Area at 4897 N. Farm Road 61 near Ash Grove and provides a staffed shooting range to practice skeet and trap shooting to hone your skills prior to the season. For current range hours and field maps, please go to the website link at <mdc.mo.gov/node/288>.

Two permits are required prior to hunting doves on the Bois D'Arc Conservation Area. A small game hunting permit is required for Missouri residents ages 16 to 64 and nonresidents ages 16 or older and a migratory bird permit is required for residents and nonresidents ages 16 or older. Permits may be purchased at a local vendor or online at <mdc.mo.gov/epermits>. Ongoing dove banding and data collection provide valuable population and movement trends and provide hunters with an opportunity to harvest a banded bird. Wings collected at the headquarters check-in station will provide age data to determine adult to juvenile ratio and population trends. On October 10 and 11, the entire area will be closed to all hunting in order to host a persons with disabilities deer hunt. —Kevin Hedgpeth, Wildlife Management Biologist

Holiday Closing July 4 • Independence Day

Dove Hunting Clinic

August 29 • Saturday • 8:30 AM-2 PM Registration required (all ages) Join us to learn the most effective methods for dove hunting. We will discuss the biology of the bird and then teach you how to wing shoot using the Effective Wing Shooting for the Hunter techniques. We will discuss using decoys and how to use concealment to your benefit.



Dove season opens September 1.



To get to the Andy Dalton Shooting Range and Outdoor Education Center, take US Highway 160 west of Willard, turn south on Farm Road 61, and go 2.5 miles, facility on the west side of road. Facilities include an outdoor education center and archery, rifle, pistol, and shotgun ranges, including skeet and trap.

HOURS:

September 14-April 14

Monday and Thursday: 9 AM-4:30 PM

Friday-Sunday: 12 NOON-4:30 PM

April 15-September 13

Monday: 9 AM-4:30 PM Thursday: 9 AM-7:30 PM

Friday-Sunday: 12 NOON-4:30 PM

Closed Tuesdays, Wednesdays and all state holidays. Hours are subject to change.

FACILITIES AND FEES:

Available for individual and group use. Call for information and possible restrictions.

- Rifle/pistol range fee: \$3 per booth per hour
- Trap/skeet range fee: \$3 per person per round of 25 clay targets
- Shotgun patterning range: \$3 per person per hour
- Archery range: \$3 per person per hour
- Group use fee: \$20 per hour plus \$3 per round of 25 clay targets

TO REGISTER FOR A PROGRAM:

Programs are free. Call **417-742-4361** or email <DaltonRange@mdc.mo.gov> to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

Springfield Conservation Nature Center

4601 S. Nature Center Way, Springfield, MO 65804 • mdc.mo.gov/node/287





The Springfield Conservation Nature Center is located in southeast Springfield just west of US-65 off the James River Freeway (US-60). Indoors, enjoy nature exhibits, attend programs, purchase hunting and fishing permits, browse through a nature-related gift shop, and pick up free conservation brochures. Outdoors, enjoy three miles of hiking trails through a variety of natural communities. Call to schedule a naturalist-led program for your organized group.

CURRENT HOURS:

March 1-October 31

Building: Tuesday-Saturday: 8 AM-5 PM

Sunday: 12 NOON-5 PM **Closed Monday**

Trails: Sunday-Saturday: 8 AM-8 PM

TO REGISTER FOR A PROGRAM:

Programs are free. Call **417-888-4237** to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

July Events

Outdoor Hazards

July 9 • Thursday • 1–3 PM

No registration required (ages 5-adult) What just bit me? And why am I so itchy? What kind of snake was that? If you have ever asked these questions, then join us to learn the answers. You'll learn which plants and animals to avoid making sure you and your family have the best outdoor adventures possible this summer.

Primitive Skills Series Making Cordage

July 12 • Sunday • 1–3 PM *No registration required (all ages)* Volunteer Naturalist and primitive skills specialist Don Brink demonstrates how to weave plant fibers into cordage. Try your hand at this age-old skill and learn about the plants primitive man used to make cordage. Stop by anytime.

July Events _

For Adults Only-James River Float

July 15 • Wednesday • 9 AM-3 PM Registration begins July 1 (ages 18-adult) If you're a first-time or novice canoeist, this is a great chance to "get your feet wet." Pack a sack lunch, bring plenty of water, and wear clothes you can get wet. We will rent canoes from an outfitter in Galena. Cost for canoe rental is \$19 per person. Please bring cash and exact change. Meet at the nature center and carpool.

Where Nature Meets Glass Chihuly Art For Children

July 15 • Wednesday • 10-11:30 AM *Grades kindergarten to second (ages 5–7)*

July 15 • Wednesday • 1-2:30 PM Grades third to fifth (ages 8–12)

Registration begins July 1

Draw-Paint-Sculpt. Join art instructor Janel Bagby for an interplay of iridescent light, color, and organic form. Find inspiration in Dale Chihuly's Millefiori (Italian for a "thousand flowers") and the Glasshouse-Monarch Window. Create your own flower, plant, and butterfly art piece. Adults are welcome to participate with their children.

Where Nature Meets Glass Chihuly Art For Children

July 16 • Thursday • 10-11:30 AM *Grades kindergarten to second (ages 5–7)* July 16 • Thursday • 1-2:30 PM *Grades third to fifth (ages 8−12)* Registration begins July 1 See above description of program.

Ms. Ladybug is on vacation this month



Firefly Frolic

July 16 • Thursday • 8-9 PM Registration begins July 1 (all ages) Fireflies have intridued and fascinated children and adults on countless summer evenings. Join Volunteer Naturalist Nancy Ryan to learn everything you ever wanted to know about nature's "flashlights." Bring your flashlight and join the fun.

Hiking Club

July 17 • Friday • 8:15-11:30 AM Registration begins July 1 (ages 18-adult) Hike at Busiek State Forest and Wildlife Area with Volunteer Naturalist Pat Stritzel. Meet at the nature center and carpool. Bring water and snacks and wear comfortable hiking shoes. Hike is three miles and rated moderate in difficulty.



Conservation TEEN Club-Float Trip

July 22 • Wednesday • 9 AM-4 PM Registration begins July 1 (ages 12–17) Come along as we float and explore one of the many streams in the Ozarks. Drinks, lunch, and transportation will be provided.

Conservation Kids' Club-Nature Games

July 23 • Thursday • 6:30-7:45 PM Registration begins July 1 (ages 7–12) Hey, kids, are you "game" for a night of friendly competition to test your nature knowledge? Put on your thinking caps and come prepared to play some nature versions of your favorite games including Pictionary, Bingo, and Jeopardy. Show off what you know and learn new facts during this fun-filled evening. Please, no younger siblings and only one adult per group of kids.

Nature Art With A Chinese Brushstroke

July 24 • Friday • 1–2:30 PM or 2:45–4:15 PM Registration begins July 1 (ages 8-adult) Art instructor and nature enthusiast Hing Wah Hatch will increase your powers of observation as she demonstrates, step-by-step, how to capture the essence of local plants and animals through Chinesestyle painting. Participants will go home with more nature knowledge and their own artistic masterpiece. Observers are welcome to stop by anytime.

Venomous Snakes Of Missouri

July 25 • Saturday • 2-3 PM No registration required (all ages) You've heard the tales about them, now's your chance to learn the truth. We'll explore the myths and realities of Missouri's misunderstood pit vipers.

Venomous Snakes On Display

July 25 • Saturday • 3-4 PM No registration required (all ages) Come see live specimens of Missouri's venomous snakes on display courtesy of Finley Valley Serpentarium. Stop by anytime.

Continued July Events and **Little Acorns** programs are listed on page 5.

Springfield Conservation Nature Center

4601 S. Nature Center Way, Springfield, MO 65804 • mdc.mo.gov/node/287

Little Acorns

Please limit to one per month.

Programs are 45 minutes in length.

July Events_

Registration begins July 1 (ages 3–6)

Slithery Snakes

July 8 • Wednesday • 11 AM or 1:30 PM July 18 • Saturday • 11 AM Kids, slither in and get up close and personal with nature's most misunderstood reptile.

Nature's Nightlights

July 17 • Friday • 11 AM or 1:30 PM Summer evenings will be filled with magic and fun when your little ones discover fireflies with Volunteer Naturalist Nancy Ryan.

August Events

Registration begins August 1 (ages 3–6)

Butterfly Magic

August 21 • Friday • 11 AM or 1:30 PM August 22 • Saturday • 11 AM Butterflies grow up in a magical way. Join us and travel through the butterfly's life cycle-from its humble beginnings to its glorious finish!

The Praying Mantis

August 26 • Wednesday • 11 AM or 1:30 PM While praying mantids might seem to be serene and peaceful, their "praying" posture is quite misleading. Come and discover what these panthers of the insect world are really like.

July Events

Dragons Of The Insect World

July 28 • Tuesday • 11 AM-12 NOON Registration begins July 1 (ages 6-adult) Dragonflies may look beautiful and delicate to you, but to many insects they are fierce and hungry predators to be avoided. Join Volunteer Naturalist Mike Mihalik to learn about the lifestyles of these mysterious dragons of the insect world.

Beginner Archery

July 29• Wednesday • 9–10 AM or 10–11 AM Registration begins July 1 (ages 8-adult) You don't have to be a hunter to become a skilled archer. Learn a new skill and spend time practicing. No experience is necessary and archery equipment will be provided.

August Events_

Hummingbird Feeders

August 5 • Wednesday • 1-3 PM No registration required (ages 5 and up with adult assistance)

Stop by to learn how to make a hummingbird feeder. You supply the empty baby food jar and lid and we'll provide the rest. By hanging your feeder, you'll attract hummingbirds and their newly hatched young to your backyard. Please, no organized groups.

Conservation TEEN Club-Snorkeling

August 12 • Wednesday • 9 AM-5 PM Registration begins August 1 (ages 12–17) Come beat the heat and experience a fish-eve view of an Ozarks creek. No prior snorkeling experience is necessary. Transportation and lunch will be provided. You may bring your own mask and snorkel or use ours.

Story Time With Ms. Ladybug

August 12 • Wednesday, 11-11:30 AM *No registration required (ages 2–6)* Join Volunteer Naturalist Joyce Tolliver as she reads a nature story and shares activities with your 2-6 year olds. Please, no organized groups.

Hiking Club

August 22 • Saturday • 8:15 AM-4 PM Registration begins August 1 (ages 18-adult) Cool off this summer by wading through Hunter Creek at Vera Cruz Conservation Area with Volunteer Naturalist Mike Mihalik. Meet at the nature center and carpool. Bring a sack lunch and water and wear clothes you can get wet and sturdy shoes (water shoes recommended for the creek). Ninety percent of the time will be in water. Hike is approximately two miles and rated moderate in difficulty.

Temporary Exhibits

July

Missouri Junior Duck Stamp Contest

August

Touched By Butterflies

Photography by *Chris Barnhart*

The Art Of Woodcarving

August 22 • Saturday • 1-2 PM Registration begins August 1 (ages 12–adult) Try your hand at woodcarving with members of the Southern Missouri Woodcarving Artists as they teach carving techniques and show how to transform wood into works of art.

Woodcarving Demonstration

August 22 • Saturday • 1-4 PM No registration required (all ages) Visit with members of the Southern Missouri Woodcarving Artists as they share information with the "wood-be" carver, demonstrate carving techniques, and show works in progress. Stop by anytime.

Monarchs Rule!

August 29 • Saturday • 1–4 PM Registration begins August 1 (ages 5-adult) Every fall millions of monarch butterflies wing over the Ozarks to their winter home in Mexico. Join Volunteer Naturalists Bob and Ruby Ball and Dana Tideman for an indoor/outdoor adventure to explore the fascinating behavior and life cycle of these beautiful travelers.



No registration required (all ages)

Insect-O-Rama

August 14 • Friday • 6:30–9:30 PM

Our annual celebration of insects and the important role they play in nature returns! Insects—they fascinate us, they bug us, they surround us, and they bite us, but what would a summer evening be like without them? Join insect specialists and enthusiasts for an evening devoted to discovering insects. Grab your entire family and participate in some creepy-crawly fun for all ages.

Shepherd of the Hills Fish Hatchery and Conservation Center

483 Hatchery Road, Branson, MO 65616 • mdc.mo.gov/node/290



The Fish Hatchery and Conservation Center is located on 221 acres in Branson off Highway 165 next to Table Rock Dam. Outdoors, visitors will experience an active fish hatchery with 700,000 rainbow and brown trout in 30 pools with opportunities to feed the fish. Indoors, enjoy a 3,500 gallon aquarium and handson nature exhibits and purchase hunting and fishing permits. The area also features four hiking trails, a picnic area, a boat ramp, and access to Lake Taneycomo.

FACILITY HOURS:

Memorial Day-Labor Day Sunday-Saturday: 9 AM-6 PM **Remainder of Year** Sunday-Saturday: 9 AM-5 PM

AREA AND TRAIL HOURS:

4 AM-10 PM

The area is open to fishing 24 hours daily, but special permits and regulations do apply. Check the current fishing regulations or call for details.

TO REGISTER FOR A PROGRAM:

Programs are free. Call 417-334-4865, Ext. 0, to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

FISHING LAKE TANEYCOMO:

Before fishing on Lake Taneycomo, become familiar with the regulations and restrictions. Come by for a free brochure of the entire lake including fishing accesses. For specific details about trout fishing here and across the state, visit <mdc.mo.gov/node/5603>.

July and August Events_

Nature's Babies

July 17 • Friday • 7-8:30 PM Registration required (families, all ages) While most kids are out of school for the summer, wild animals are learning how to survive in their outdoor classroom. This program will show you what some of our local youngsters look like and what they learn to survive. Some live animals will be available to touch.

Night Hike

The habitats of southwest Missouri are very diverse. In addition to

beautiful forests, streams, lakes, and prairies, we also have deserts. Instead

August 15 • Saturday • 8-9:30 PM Registration required (families, all ages) We will take an early evening hike to experience one of our trails at night. In addition to listening to the night chorus of sounds, we will also have a couple of nighttime activities. You will see the positive impact of dark skies to animals and humans. This will be a low impact, half-mile hike. Bring bug spray and a desire to look for critters as the sun begins to set.

Glades Of The Ozarks



Scorpion

of calling them deserts, we call them glades. A glade, by definition, is an opening near the top of rocky hillsides. These open dry stretches of land have only a thin layer of soil. The lack of soil is mostly from erosion which

exposes the bedrock near the surface. On many glades, you can see large exposed rock surfaces and long parallel lines of rock circling the hillsides.

Glades are not unique to Missouri because they occur in several other states in the southeastern and central United States. However, in Missouri, glades cover more than 400,000 acres. Six types of glades



are found in our state. These are identified by their type of underlying rock such as limestone, dolomite, chert, sandstone, shale, and igneous rocks. The most common glades of the Ozarks are limestone and

Collared lizard



Watch for these animals when visiting a glade.

dolomite. These glade surfaces are very hard, so the rocks weather, break down, and build soil very

Being such a harsh habitat, it is not easy for plants and animals to survive. In fact, some of the glade inhabitants are so specialized they are only found on glades. Examples of glade plants include Ashe's juniper, smoke tree, Fremont's leather flower, and purple beard-tongue. Many of these plants have adapted to dry, shallow soils and past

frequent fires that resulted from lightning strikes. Examples of glade animals include roadrunners, collared lizards, scorpions, lichen grasshoppers, and red milksnakes. As a visitor to these habitats, we ask you not to collect or disturb these resident plants and animals.

We are fortunate in southwest Missouri to have several outstanding glades to enjoy. These include the Ruth and Paul Henning Conservation Area (Branson), Wildcat Glade Natural Area (Joplin), Busiek State Forest and Wildlife Area (south of Springfield), Drury-Mincy Conservation Area (west of Branson), and massive Hercules Glade Wilderness Area (U.S. Forest Service in western Taney County). These glades provide a wonderful opportunity for hiking, photography, and nature study. For more details about glades, visit the Missouri Department of Conservation website at <mdc.mo.gov/node/5288>. A listing of glades of the White River watershed can be found at <mdc.mo.gov/node/14114>.

— John Miller, Interpretive Center Manager

Southwest Regional Office 2630 N. Mayfair Avenue, Springfield, MO 65803 • mdc.mo.gov/node/257

What's Up In Urban Wildlife?

The distribution of urban deer hunting surveys and a new grant opportunity are two conservationrelated events taking place in the Springfield metro area in upcoming months.

Springfield residents will remember that Springfield City Council passed a bowhunting ordinance last fall for the city. This new ordinance allows for the use of bows and arrows (in conjunction with the Missouri Department of Conservation's archery season) to harvest deer within the greater Springfield metro area. This ordinance, which went into effect November 10, 2014, allows hunters to harvest deer on properties/combination of properties of two acres or more inside Springfield's city limits.

To determine harvest numbers under the new ordinance, surveys have been sent to all archery hunters with a Springfield address that telechecked a deer in Greene County last season. The results of this survey will help create and maintain deer harvest records for Springfield.

The numbers obtained from this survey will also be utilized to measure the success of the ordinance in managing Springfield's deer population by helping establish relationships between harvested deer and number of recorded deer vehicle collisions. With the passing of the ordinance and with the help of successful managed hunts on City Utilities properties, it is hoped the city's urban deer population will eventually reach numbers that are beneficial to the health of the population and to the ecological system in which they live.

Another exciting event is a new grant opportunity that will be offered this year to communities in southwest Missouri. The Community Conservation Grant Program (CCGP) focuses on supporting partner-led habitat improvement projects and connecting communities to nature. The goal of the CCGP is to restore habitat and natural communities in and around urban centers. It is also designed to engage the public through conservation education and volunteer opportunities. Eligible applicants include:

- (1) Government entities (e.g., municipal and county parks departments, public schools)
- (2) Groups that have nonprofit, 501(c)(3) status

The project possibilities are almost limitless and can include projects as diverse as invasive plant control, prairie restoration, native warm season grass plantings that might make public areas a little more interesting, or helping to restore riparian zones in damaged waterways. The grant program originated in St. Louis where it has had great success.

For more information about this grant program or about urban deer hunting in Springfield, contact Missouri Department of Conservation Urban Wildlife Biologist Ashley Schnake at 417-895-6880, ext. 1637.

- Ashley Schnake, Urban Wildlife Biologist



The Southwest Regional Office is conveniently located just west of the intersection of US-65 and Kearney in Springfield. The public may obtain information on land management, nuisance wildlife, educational opportunities, river and pond management, and more, as well as purchase hunting and fishing permits and obtain area brochures for Conservation Department areas.

HOURS: Monday–Friday: 8 AM–5 PM Closed all state holidays

PHONE: 417-895-6880

Hunter Education Sessions

Reminder

Hunter Education certification has two parts: knowledge and skills. You must complete and pass BOTH sessions to earn your certificate. For more information on Hunter Education, contact your local Missouri Department of Conservation office or visit the **Conservation Department website** at <mdc.mo.gov/node/3095>.

Classroom (Knowledge) Sessions

Location Dat	e/Time
Springfield Conservation Nature Center July 10 • Friday •	6—10 РМ
August 7 • Friday •	• 6—10 рм
Skills Sessions	
Location Dat	e/Time
Springfield Conservation Nature CenterJuly 11 • Saturday • 8 AM—12 NOON C	or 1–5 PM
August 8 • Saturday • 8 AM—12 NOON C	or 1–5 PM
Andy Dalton Shooting Range August 8 • Saturday • 8 AM	ı—12 noon
Wildcat Glades Conservation & Audubon Center August 18 • Tuesday •	• 6—10 рм
Bowhunter Education	
Location Dat	e/Time
Andy Dalton Shooting RangeAugust 15 • Saturday • 8	3 AM-5 PM

Visit <mdc.mo.gov/node/3722> to register for these sessions and to check for session changes and/or other locations.

Conservation Open House

Join the Missouri Department of Conservation and the Harry S Truman Coordinating Council on Tuesday, July 7, for a Local Environmental Advisory Forum (LEAF) at the Carthage Water and Electric, 627 W. Centennial, Carthage, where Jasper County residents can gather and discuss the conservation issues most important to them. Natural resource professionals will be available to hear your ideas and share tips for turning them into reality. An activity area will be available for kids ages 3 and up. The forum will be a come and go event from 3-7pm. For more information, contact Ronda Headland, Community Conservation Planner, at 417-866-1127, ext. 150.



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Featured Publication for July and August

Available at the Springfield Conservation Nature Center and Southwest Regional Office.

Conservation Showcase:

Dade County Prairies

Several Missouri Department of Conservation (MDC) owned/leased prairies can be explored in the western portions of Dade County. These prairies are Stony Point Prairie, Niawathe Prairie Natural Area, Wade and June Shelton Memorial Prairie, Horse Creek Prairie, and Indigo Prairie. Depending on what visitors wish to see, some of these prairies provide a high quality, high plant diversity viewing opportunity. Others have endured different histories and are currently undergoing restoration efforts. All the Dade County prairie areas provide habitat to a variety of prairie wildlife.

LOCATION: Stony Point Prairie is the most northwestern Dade County prairie and is located on D Highway. Niawathe Prairie Natural Area is located just 2 miles southeast of Stony Point. The Wade and June Shelton Memorial Prairie is 4 miles northwest of the town of Lockwood. Horse Creek Prairie is 2 miles northwest of Lockwood. Lastly, Indigo Prairie is located 4 miles southeast of Lockwood.

HISTORY: All of the Dade County prairies were purchased in the late 1970s, with the exception of Wade and June Shelton Memorial Prairie (Shelton). Shelton Prairie was purchased in 2009 through funds donated by the Wade and June Shelton family from Joplin. The funds were earmarked to be utilized for the acquisition of a prairie remnant.

Prior to MDC management, most of these prairies were hayed and/or grazed. None of these prairies have ever been plowed. More recent management has included prescribed burning, haying, and on some, grazing. Burning and grazing are utilized in an effort to mimic historic disturbance that helped shape the prairie natural communities over thousands of years.

HUNTING: Of the five Dade county prairies highlighted here, all are open to hunting with the *exception* of Niawathe Prairie. Niawathe is partially owned by The Nature Conservancy, whose lands are closed to hunting in most areas. Thus, the entire area is closed to hunting. Rabbits and quail are numerous on Stony Point and Indigo Prairies. Shelton and Horse Creek are considerably more open and afford minimal opportunities for small game hunting.

NATURE VIEWING AND PHOTOGRAPHY: Birding, wildflower viewing and photography, and butterfly viewing are what make these prairies special. All of these prairies are home to a variety of grassland plants and wildlife. Henslow's sparrows, Bell's vireos, dickcissels, loggerhead shrikes, bobwhite quail, and many other grassland birds are common on the Dade County prairies. Shelton Prairie harbors the last remaining Dade County prairie chickens. On grazed prairies, such as Stony Point and Shelton, birders may find grasshopper sparrows and upland sandpipers as well. Short-eared owls also frequent these prairies in late winter. The owls seem to congregate in the largest numbers at Niawathe and Horse Creek Prairies.

Many species of wildflowers can be seen blooming throughout the summer. Wildflower enthusiasts often venture out throughout the growing season as each month brings a different array of bloom colors. Early in the season, Indian paintbrush can be seen, followed by cream wild indigo and pale purple coneflower in June. July typically brings a striking display of royal catchfly and different species of blazing star. Late summer and fall usher in a variety of asters and goldenrods. There are hundreds of other species for visitors to identify and view. These are a few of the showy, easily identified plants that may be observed. Niawathe and Horse Creek Prairies offer the best opportunities for viewing wildflowers.

Some of these prairies are also home to a wide variety of lesser known wildlife. A prairie-dependent species that can be found at all five Dade County prairies is the regal fritillary butterfly. Many other species of butterflies are present, but the regal fritillary draws the most attention due to its size and striking coloration. The prairie mole cricket, an uncommon insect which depends upon prairie remnants for its existence, can be found at Niawathe Prairie. They spend most of their life in burrows underground, so are rarely seen. However, visitors who know their call may hear them after sunset in spring. Stony Point, Indigo, and Niawathe Prairies also have northern crawfish frogs. All three of these species are listed as Species of Conservation Concern. This is due to their populations being severely reduced over the last 50 years primarily as a result of the loss of prairie habitat.

For more information about these prairies, call 417-326-5189 or visit the MDC Conservation Atlas online at <mdc.mo.gov/atlas>.

—Kyle Hedges, Wildlife Management Biologist